



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,706	02/13/2002	Michael Featherby	73498	9800
30542	7590	04/13/2004	EXAMINER	
FOLEY & LARDNER P.O. BOX 80278 SAN DIEGO, CA 92138-0278			DANG, PHUC T	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/075,706	Applicant(s) <i>14</i> FEATHERBY ET AL	
	Examiner PHUC T DANG	Art Unit 2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 14, 16 and 21 is/are rejected.
- 7) ☒ Claim(s) 3-6, 8, 15 and 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1102 &amp; 0103</u> | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2818

### **DETAILED ACTION**

1. This application is a CON of 09/520,928 filed on March 8, 2000 (U.S. Patent No. 6,368,899).

### **Election/Restrictions**

2. Applicant's election with traverse of Group I (claims 1-8 and 14-21) filed October 20, 2003 is acknowledged.

Because Applicant did not distinctly and specifically point out the supposed error in the restriction requirement, the election has been treated as an election without traverse (MPEP 818.03(a)). Applicants have the right to file a divisional application covering the subject matter of the non-elected claims.

### **Oath/Declaration**

3. The oath/declaration filed on February 13, 2002 is acceptable.

### **Information Disclosure Statement**

4. The office acknowledges receipt of the following items from the applicant:

Information Disclosure Statement (IDS) filed on November 14, 2002 and January 31, 2003.

### **Specification**

5. The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### **Claim Rejections - 35 USC § 103**

Art Unit: 2818

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 7, 14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shubert et al. (U.S. Patent No. 6,365,521 B1).

Regarding claims 1 and 14, Shubert et al. disclose a passivation for an integrated circuit comprising:

- an electronic circuit die (110, 115, 105, Fig. 8);
- an inorganic layer (120, Fig. 8) outside the electronic circuit die for preventing moisture from reaching the electronic circuit die; and
- an organic layer (125, Fig. 9) outside the inorganic layer for protecting the inorganic layer.

Shubert et al. disclose all the features as discussed above, but do not disclose an apparatus of a hermetic sealed device for an electronic circuit die as claimed in the invention, but the passivation for an integrated circuit of Shubert et al. has the same functional operation of the claimed invention.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to apply the functional operation of the hermetic sealed device for an

Art Unit: 2818

electronic circuit die in Shubert et al. reference for a purpose of improving a hermetic sealed device.

Regarding claim 2, Shubert et al. disclose the inorganic layer is adjacent to the organic layer [Fig. 9].

Regarding claims 7 and 16, Shubert et al. disclose the inorganic layer comprises a material selected from the group consisting of metal oxides, silicon nitride, silicon carbide, aluminum nitride, and diamond-like carbons [col. 5, lines 54-59].

Regarding claim 21, Shubert et al. disclose the inorganic layer encloses the electronic circuit die [Fig. 8].

#### **Allowable Subject Matter**

7. Claims 3-6, 8, 15, and 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **Conclusion**

8. **Applicants are advised to cancel the non-elected claims (9-13) in response to the next Office action if the application is considered to be allowed.**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is (571) 272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on 703-308-4910. The fax phone numbers for the organization

Art Unit: 2818

where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-872-9306 for After Final communications.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Phuc T. Dang

PD

A handwritten signature in cursive script, appearing to read 'Phuc T. Dang', with a long horizontal flourish extending to the right.

Primary Examiner

Art Unit 2818

March 19, 2004